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## 12-06:01

## EL844051657

PTO/SB/05 (03-01)

Approved for use through 10/31/2002. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCED

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### UTILITY PATENT APPLICATION TRANSMITTAL

MI22-1839 Attorney Docket No. First Inventor Warren M. Farnworth Methods of Bonding Solder etc.

EL 844051657 Express Mail Label No. (Only for new nonprovisional applications under 37 CFR 1.53(b)) Assistant Commissioner for Patents **APPLICATION ELEMENTS** ADDRESS TO: Box Patent Application Washington, DC 20231 See MPEP chapter 600 concerning utility patent application contents. Fee Transmittal Form (e.g., PTO/SB/17) CD-ROM or CD-R in duplicate, large table or (Submit an original and a duplicate for fee processing) Computer Program (Appendix) Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) Specification [Total Pages (preferred arrangement set forth below) Computer Readable Form (CRF) - Descriptive title of the invention Plus title pg. b. Specification Sequence Listing on: - Cross Reference to Related Applications i. CD-ROM or CD-R (2 copies); or - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, ii. paper or a computer program listing appendix Statements verifying identity of above copies - Background of the Invention - Brief Summary of the Invention ACCOMPANYING APPLICATION PARTS - Brief Description of the Drawings (if filed) Assignment Papers (cover sheet & document(s)) - Detailed Description - Claim(s) Power of Assoc.) 37 CFR 3.73(b) Statement - Abstract of the Disclosure (when there is an assignee) English Translation Document (if applicable) Drawing(s) (35 U.S.C. 113) [ Total Sheets X Copies of IDS Information Disclosure 12. 5. Oath or Declaration Citations cles & foreighn [ Total Pages Statement (IDS)/PTO-1449 Preliminary Amendment Newly executed (original or copy) Copy from a prior application (37 CFR 1.63 (d)) (for continuation/divisional with Box 18 completed) 13. Return Receipt Postcard (MPEP 503) (Should be specifically itemized) Certified Copy of Priority Document(s) (if foreign priority is claimed) DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR Nonpublication Request under 35 U.S.C. 122 1 63(d)(2) and 1.33(b). (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. Sub. Drawing Request Application Data Sheet. See 37 CFR 1.76 Other: Sub. Formal Drawing 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: of prior application No.: 09  $\Box X$ Continuation Divisional Continuation-in-part (CIP) Examiner A. Tugbang Group Art Unit For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS 021567 Customer Number or Bar Code Label Correspondence address below Frederick M. Fliegel, Ph.D. Name Wells, St. John, Roberts, Gregory & Matkin P.S. Address State Zip Code City Fax Country Telephone Frederick M. Fliegel, Ph.D. 36,138

Burden Hour Statement. This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231

contractor Bill doubter

Registration No. (Attorney/Agent)

PTO/SB/17 (10-01) Approved for use through 10/31/2002. OMB 0651-0032

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# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

**TOTAL AMOUNT OF PAYMENT** 

(\$) 740.00

Complete if Known				
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Application Number		_		
Filing Date				
First Named Inventor	Warren M. Farnworth			
Examiner Name				
Group Art Unit				
Attorney Docket No.	MI22-1839			

METHOD OF PAYMENT	FEE CALCULATION (continued)		
1. X The Commissioner is hereby authorized to charge indicated fees and credit any overnayments to:	3. ADDITIONAL FEES		
Indicated fees and credit any overpayments to:  Deposit	Large Small		
Account Number 23-0925	Entity Entity  Fee Fee Fee Fee Fee Fee Fee Description	Fee Paid	
Deposit	Code (\$) Code (\$)	100:4:4	
Account Name Wells, St. John et al.	105 130 205 65 Surcharge - late filing fee or oath		
Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17	127 50 227 25 Surcharge - late provisional filing fee or cover sheet		
Applicant claims small entity status.	139 130 139 130 Non-English specification		
See 37 CFR 1 27	147 2,520 147 2,520 For filing a request for ex parte reexamination		
2. X Payment Enclosed:  X Check Credit card Money Other	112 920* 112 920* Requesting publication of SIR prior to Examiner action		
FEE CALCULATION	113 1,840* 113 1,840* Requesting publication of SIR after Examiner action		
1. BASIC FILING FEE	115 110 215 55 Extension for reply within first month		
Large Entity Small Entity	116 400 216 200 Extension for reply within second month		
Fee Fee Fee Fee Description	117 920 217 460 Extension for reply within third month		
Code (\$) Code (\$) Fee Paid  101 740 201 370 Utility filing fee 74()	118 1,440 218 720 Extension for reply within fourth month		
106 330 206 165 Design filing fee	128 1,960 228 980 Extension for reply within fifth month		
107 510 207 255 Plant filing fee	119 320 219 160 Notice of Appeal		
108 740 208 370 Reissue filing fee	120 320 220 160 Filing a brief in support of an appeal		
114 160 214 80 Provisional filing fee	121 280 221 140 Request for oral hearing		
740.00	138 1,510 138 1,510 Petition to institute a public use proceeding		
SUBTOTAL (1) (\$) 740.00	140 110 240 55 Petition to revive - unavoidable		
2. EXTRA CLAIM FEES Fee from	141 1,280 241 640 Petition to revive - unintentional		
Extra Claims below Fee Paid	142 1,280 242 640 Utility issue fee (or reissue)		
Total Claims 19 -20** = 0 X = 0	143 460 243 230 Design issue fee		
Independent S - 3** = 0 x = 0	144 620 244 310 Plant issue fee		
Multiple Dependent	122 130 122 130 Petitions to the Commissioner		
1	123 50 123 50 Processing fee under 37 CFR 1.17(q)		
Large Entity Small Entity Fee Fee Fee Fee Description	126 180 126 180 Submission of Information Disclosure Stmt		
Code (\$) Code (\$) 103 18 203 9 Claims in excess of 20	581 40 581 40 Recording each patent assignment per property (times number of properties)		
102 84 202 42 Independent claims in excess of 3	146 740 246 370 Filing a submission after final rejection (37 CFR § 1.129(a))		
104 280 204 140 Multiple dependent claim, if not paid  109 84 209 42 ** Reissue independent claims over original patent	149 740 249 370 For each additional invention to be examined (37 CFR § 1.129(b))		
110 18 210 9 ** Reissue claims in excess of 20	179 740 279 370 Request for Continued Examination (RCE)		
and over original patent	169 900 169 900 Request for expedited examination of a design application		
SUBTOTAL (2) $(\$)$ 0	Other fee (specify)		
**or number previously paid, if greater, For Reissues, see above *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)			

SUBMITTED BY			Complete (ii	f applicable)
Name (PrintiType)	Frederick M Fliegel Philinegistration	36,138	Telephone	509-624-4276
Signature	Oh -		Date	0x4520011

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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## EL844051657

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Priority Application Serial No	
Priority Filing Date	September 3, 1998
Inventor	. Warren M. Farnworth et al.
Assignee	Micron Technology, Inc.
Priority Group Art Unit	3729
Priority Examiner	A. Tugbang
Attorney's Docket No	
TITLE: Methods of Bonding Solder Balls To Bond Pads	on a Substrate

Assistant Commissioner for Patents Washington, D. C. 20231 Attention: Official Draftsman

### SUBSTITUTE DRAWING REQUEST

Please enter the enclosed substitute formal drawings in the above-referenced application in place of drawings originally filed. The content of the drawings are identical to those now on file in this application.

Acknowledgment of receipt of the formal drawings and their acceptance into the file is requested.

Respectfully submitted,

Date: (24 ) 100

By:

Frederick M. Fliegel, Ph.D.

Reg. No.: 36,138

WELLS, ST. JOHN, ROBERTS, GREGORY & MATKIN P.S.

601 W. First Avenue, Suite 1300

Spokane, WA 99201-3828

(509) 624-4276

Enclosures:

3 Sheets of Formal Drawings, Figs. 1-7.